

Amendments to the Claims:

None

Listing of Claims:

Claim 1 (original): A chemical mechanical polishing monitoring system, comprising:
a pump delivering a slurry to a polishing pad; and
a rotation sensing device coupled to the pump sensing a rotation of the pump and generating a signal indicative of the rotation of the pump.

Claim 2 (original): The system of Claim 1, further comprising a computer operable to receive the signal from the rotation sensing device and to compare the signal to a threshold signal in order to monitor the pump during use.

Claim 3 (original): The system of Claim 2, wherein the computer is further operable to generate a message based on the comparison.

Claim 4 (original): The system of Claim 1, further comprising a controller operable to send a drive voltage to the pump based on a desired volumetric flow rate for the slurry.

Claim 5 (original): The system of Claim 4, wherein the signal is a voltage and further comprising a computer coupled to the rotation sensing device and the controller, the computer operable to:

- receive the voltage from the rotation sensing device;
- receive the drive voltage from the controller; and
- compare the voltage to a threshold voltage that is based, in part, on the drive voltage in order to monitor the pump during use.

Claim 6 (original): The system of Claim 1, wherein the pump comprises a peristaltic pump.

Claim 7 (original): The system of Claim 1, wherein the rotation sensing device comprises a tachogenerator.

Claim 8 (original): The system of Claim 1, wherein the rotation sensing device comprises an encoder.

Claim 9 (original): The system of Claim 1, wherein the rotation sensing device comprises a fiber optic detector.

Claim 10 (original): The system of Claim 1, wherein the rotation sensing device comprises a digital counter.

Claim 11 (original): A chemical mechanical polishing monitoring system, comprising:

- a peristaltic pump operable to deliver a slurry to a polishing pad;
- a controller operable to send a drive voltage to the peristaltic pump based on a desired volumetric flow rate for the slurry;
- a rotation sensing device coupled to a rotating shaft of the peristaltic pump and operable to sense a rotation of the peristaltic pump, the rotation sensing device further operable to generate a voltage indicative of the rotation of the peristaltic pump; and
- a computer coupled to the rotation sensing device and the controller, the computer operable to:
 - receive the drive voltage from the controller;
 - receive the voltage from the rotation sensing device; and
 - compare the voltage to a threshold voltage that is based, in part, on the drive voltage in order to monitor the peristaltic pump during use.

Claim 12 (original): The system of Claim 11, wherein the computer is further operable to generate a message based on the comparison.

Claim 13 (original): The system of Claim 11, wherein the rotation sensing device is selected from the group consisting of a tachogenerator, an encoder, a fiber optic detector, and a digital counter.

Claim 14 (original): A chemical mechanical polishing monitoring method, comprising:
 sending a drive voltage to a pump, the drive voltage based on a desired volumetric flow rate for a slurry;
 delivering, via the pump, the slurry to a polishing pad;
 sensing a rotation of the pump;
 generating a signal indicative of the rotation of the pump; and
 comparing the signal to a threshold signal that is based, in part, on the drive voltage in order to monitor the pump during use.

Claim 15 (original): The method of Claim 14, further comprising generating a message based on the comparison.

Claim 16 (original): The method of Claim 14, wherein the pump comprises a peristaltic pump.

Claim 17 (original): The method of Claim 14, wherein sensing a rotation of the pump comprises sensing a rotation of the pump via a tachogenerator.

Claim 18 (original): The method of Claim 14, wherein sensing a rotation of the pump comprises sensing a rotation of the pump via an encoder.

Claim 19 (original): The method of Claim 14, wherein sensing a rotation of the pump comprises sensing a rotation of the pump via a fiber optic detector.

Claim 20 (original): The method of Claim 14, wherein sensing a rotation of the pump comprises sensing a rotation of the pump via a digital counter.